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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,705	11/21/2003	Vadim Sheinin	YOR920030561US1 (17147)	2960
23389 7590 09/25/2007 SCULLY SCOTT MURPHY & PRESSER, PC 400 GARDEN CITY PLAZA SUITE 300 GARDEN CITY, NY 11530			EXAMINER BLOOM, NATHAN J	
			ART UNIT 2624	PAPER NUMBER
			MAIL DATE 09/25/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/719,705	SHEININ, VADIM	
	Examiner	Art Unit	
	Nathan Bloom	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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### **DETAILED ACTION**

Applicants' response to the last Office Action, filed on July 5<sup>th</sup>, 2007 has been entered and made of record.

#### ***Response to Amendment***

Applicants' amendment to claim 19 has successfully overcome the claim objection and thus objection of claim 19 has been withdrawn.

#### ***Response to Arguments***

1. Applicant's arguments, see applicants', filed 07/05/2007, with respect to the rejection(s) of claim(s) 1-25 under Pittel, Fujisaka, and Hansen have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Schiller and Pittel.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pittel (US 2003/0095708) in view of Schiller (US 2002/0031243).

Instant claim 1: A dynamic handwriting recognition system for a pervasive device comprising:

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a touch screen device [*Schiller paragraphs 0032-0035 teaches the use of a touch screen device (digitizing pad) on a PDA*];

a stylus means enabling a user to write on said touch screen, said touch screen generating dynamic information associated with stylus writing [*Schiller teaches the use of the touch screen to generate dynamic handwriting information in combination with a stylus means is inherent for a touch screen device such as is described for use in Schiller which requires the generation of a signature.*];

a digital image capture means mounted in said pervasive device for obtaining images of said stylus as said user writes on said touch screen; means for processing said obtaining images and extracting non screen-related information associated with stylus manipulation by said user [*Schiller teaches the use of handwriting information generated by the touchpad in combination with non touchpad information in paragraph 0060 (tilt information) to increase the accuracy of the recognition. However, Schiller does not teach the measuring or processing of this data with an attached camera device. However, Pittel: Teaches in Fig. 1-2, 7-8, 11, paragraphs 0003, 0004 (tilt of pen relative to writing surface), 0026, the use of a digital camera on a mobile device (such as a PDA see beginning of paragraphs 0004 and 0026) to perform handwriting recognition. Also, in paragraph 0004 Pittel teaches the measurement of the tilt of the writing element, which is known as taught by Schiller to increase the accuracy of the handwriting recognition. Thus it would have been obvious to one of ordinary skill in the art to combine the teaching of Schiller with Pittel to substitute the pen based tilt measurement referred to in Schiller with a known camera based technique as taught by Pittel. Furthermore, Pittel teaches in*

*paragraph 0022 that a camera provides a real time approach and an increased signal to noise ratio thus providing up to date accurate readings.];*

and handwriting recognition means receiving both said dynamic touch screen information and extracted non touch screen-related information from said processed images for recognizing writing of said user, wherein improved handwriting recognition is achieved [*See the rejection above.*].

Instant claim 2: The dynamic on-line handwriting recognition system as claimed in claim 1, wherein said extracted non screen-related information include tilt parameters associated with stylus manipulation [*See the rejection of claim 1 wherein both Pittel and Schiller teach the advantage of stylus tilt parameters.*].

Instant claim 3: The dynamic handwriting recognition system as claimed in claim 1, wherein said pervasive device comprises a Personal Digital Assistant (PDA) device [*Pittel discloses the use of the camera on a portable electronic device in paragraph 0004 and Schiller in paragraph 0035 teaches a PDA.*].

Instant claim 4: The dynamic handwriting recognition system as claimed in claim 2, further including a touch screen control device for generating coordinates of said stylus writing upon said touch screen [*The generation of coordinates is an inherent part of handwriting recognition on a touch screen display. Furthermore, see paragraph 0060 of Schiller wherein the x,y vector*

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*data is used, and one of ordinary skill in the art understands that vectors have a direction, magnitude, and coordinate positions.]*

Instant claim 5: The dynamic handwriting recognition system as claimed in claim 2, wherein said digital image capture means obtains images in a plane perpendicular to a plane defined by said touch screen device [*Pittel Fig. 1 and 2*].

Instant claim 6: The dynamic handwriting recognition system as claimed in claim 4, wherein said pervasive device implements pattern recognition means for extracting said non touch screen-related pen information [*Pittel: paragraph 0004 "The software is configured to apply pattern recognition to signals from the digital cameras"*].

Instant claim 7: The dynamic handwriting recognition system as claimed in claim 6, wherein said stylus means includes elements enabling recognition by said pattern recognition means [*Pittel: Fig 7 paragraph 0065 "The black (or other colored) tip of the marker would then be automatically tracked by the same phone and camera". Furthermore, it has been known to one of ordinary skill in the art to track an object based on its own properties or a particular pattern (i.e. pattern recognition) placed on the object.*].

Instant claim 8: The dynamic handwriting recognition system as claimed in claim 7, wherein said elements enabling pattern recognition includes colored segments in a structure known to said pattern recognition means [*Pittel: As per rejection of instant claim 8 the tip can be black or*

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*colored hence distinguishing it from the lighter colored writing surface by the different color segments.].*

Claims 9-16 describe the method performed by the system of claims 1-8, and as per rejection of claims 1-8 the system has been shown to be within the knowledge of "one of ordinary skill in the art". Furthermore, since the system performs the described method then the method was also known to one of ordinary skill in the art at the time of the invention.

Instant claims 17-20: The limitations of instant claims 17-20 are encompassed by the limitations of instant claims 1-2 and 4-5. Thus instant claims 17-20 are rejected as per the rejections of instant claims 1-2 and 4-5.

Instant claims 21-23: The limitations of instant claims 21-23 are encompassed by the limitations of instant claims 6-8. Thus instant claims 21-23 are rejected as per the rejections of instant claims 6-8.

#### ***Contact Information***

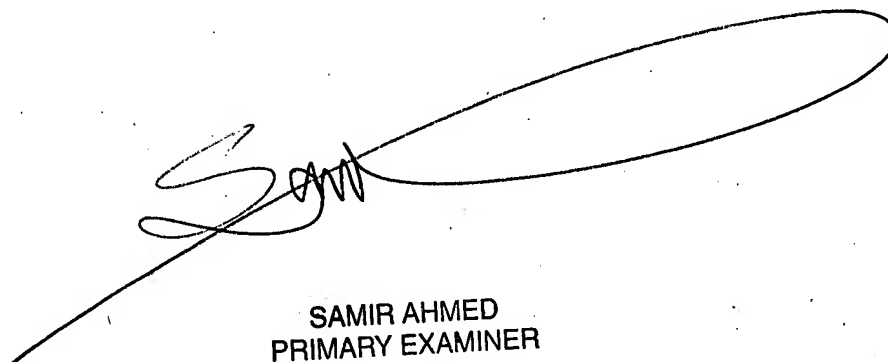
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Bloom whose telephone number is 571-272-9321. The examiner can normally be reached on Monday through Friday from 8:30 am to 5:00 pm (EST).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samir Ahmed, can be reached on 571-272-7413. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NB

A handwritten signature in black ink, appearing to be 'Samir', followed by a large, elongated oval loop.

SAMIR AHMED  
PRIMARY EXAMINER